

云南凤仙花属新类群\*

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摘要: 记述了云南产凤仙花属 (*Impatiens* L.) 19 个新种 1 个新变种。即: 长喙凤仙花; 怒江凤仙花; 德钦凤仙花; 德浚凤仙花; 片马凤仙花; 文山凤仙花; 老君山凤仙花; 麻栗坡凤仙花; 版纳凤仙花; 昔马凤仙花; 孙氏凤仙花; 大关凤仙花; 马楠凤仙花; 绥江凤仙花; 紫溪凤仙花; 滇南凤仙花; 耳叶棒凤仙花; 二甫凤仙花; 半坡凤仙花; 大甫凤仙花。

关键词: 凤仙花属; 新种; 云南

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New Taxa of *Impatiens* from Yunnan

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**Abstract:** Nineteen new species and one new variety of the genus *Impatiens* L. from Yunnan, China are described. They are *Impatiens longirostris*; *I. salwinensis*; *I. deqinensis*; *I. yui*; *I. pianmaensis*; *I. wenshanensis*; *I. laojunshanensis*; *I. malipoensis*; *I. bannaensis*; *I. ximaensis*; *I. sunbixingana*; *I. daguanensis*; *I. mananensis*; *I. suijiangensis*; *I. zixishanensis*; *I. diannanensis*; *I. claviger* var. *auriculata*; *I. erfuensis*; *I. banpoensis*; *I. dafuensis*.

**Key words:** *Impatiens*; New species; Yunnan

1 长喙凤仙花 新种 图 1: 1 ~ 8

*Impatiens longirostris* S. H. Huang sp. nov.

Species haec habitu *I. drepanophorae* Hook. f. valde affinis, sed a qua bracteis majoribus, ovatis, apice longirostribus, floribus rubellis vel aurantiaco-rubris; vexillo costato dorso semiorbiculari-cristato; labello limbo antice longirostrato praednto facile differt.

Herba annua, circ. 60 cm alta. Caulis erectus, ramosus, angulatus, glaber. Folia alterna, versus apicem caulis conferta, membranacea, ovata vel ovato-oblonga, 3-7 cm longa, 1.5-2.5 cm lata, apice acuminata vel caudata, basi late cuneata, glandulis clavatis instructa, margine crenata, crenis mucronatis, supra viridia, parce albido-puberula, subtus pallide viridia, subglabra, nervis lateralibus 5-7-paribus; Petiolus 4-5 cm longus. Pedunculi ex

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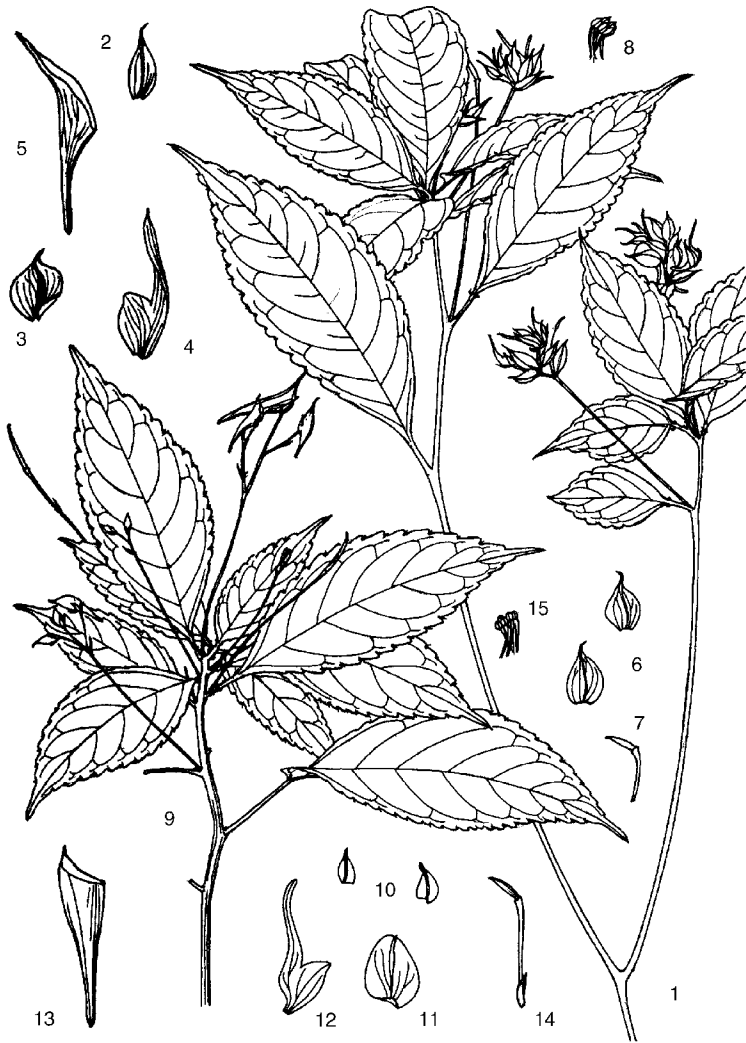


图1 1~8. 长喙凤仙花; 1. 植株; 2. 侧生萼片; 3. 旗瓣; 4. 翼瓣; 5. 唇瓣; 6. 苞片; 7. 子房;  
8. 花丝及花药; 9~15. 滇南凤仙花; 9. 植株; 10. 侧生萼片; 11. 旗瓣; 12. 翼瓣;  
13. 唇瓣; 14. 子房; 15. 花丝及花药。(吴锡麟绘)

Fig. 1 1-8. *Impatiens longirostris* S. H. Huang, 1. Plant; 2. Lateral sepal; 3. Standard; 4. Wing; 5. Lip; 6. Bract;  
7. Ovary; 8. Filaments & anthers; 9-15. *Impatiens austroyunnanensis* S. H. Huang, 9. Plant; 10. Lateral sepal;  
11. Standard; 12. Wing; 13. Lip; 14. Ovary; 15. Filaments & anthers. (Drawn by Wu Xi-lin).

axillis foliorum superiorum edentes, 3-5 cm longi, 4-5-flori, versus apicem conferti; pedicelli 0.8-1.2 cm longi, graciles, glabri, basi bracteati; bracteae ovatae, rubellae vel aurantiaco-rubrae, 7-7.5 mm longae, 5-5.5 mm latae, apice rostratae, rostro 2.5-3 mm longo. Flores rubelli vel aurantiaco-rubri; sejala lateralialia 2, ovato-oblonga, 7 mm longa, 4 mm lata, apice rostrata, 2.5-3 mm longa, basi obtusa; vexillum ovatum, 8-9 mm longum et latum, apice mucronatum, basi leviter attenuatum, costa dorso semiorbiculari-cristata; alae subsessiles, bilobatae, circ. 2 cm longae, lobo basali ovato, distali oblongo, eo basali 2-plo longiore, apice acuto; labellum anguste in-

fundibulare inferne in calcar circ. 1.2 cm longum attenuatum, limbo obliquo, 5–6 mm longo, 1 cm lato, antice lingirostri, rostro 0.8–1 cm longo; stamina 6 mm longa filamentis filiformibus, antheris leviter acutis; ovarium lineare, 2.5 mm longum, apice acutum, glabrum. Capsulae immaturae.

**Yunnan** (云南): Lushui (泸水), Yaojiaping (姚家坪) alt. 2 700 m, 1996–10–26, Gaoligongshan Exped. (高黎贡山考察队) 8104 (Holotypus in KUN); Lushui (泸水), Pianma (片马) alt. 2 700 m, in forest 1964–8, Wu Su-gong (武素功) 8112 (KUN); Tengchong (腾冲), qushi (曲石), jiangju (江苴), alt. 2 000–2 300 m, 1960–9–14, Yin Wen-qing (尹文清) 60–1080 (KUN).

本种近具镰凤仙花 (*I. drepanophora* Hook. f.) 但本种苞片较大, 卵形, 先端有长喙, 花淡红色或橙红色, 旗瓣背面中肋有半圆形鸡冠状突起, 唇瓣檐部前端有更长的喙而异。

## 2 怒江凤仙花 新种 图 3: 8–13

*Impatiens salwinensis* S. H. Huang sp. nov.

Species haec habitu *I. yui* S. H. Huang similis, sed a qua floribus albis; sepalis lateralibus 2, minoribus, ovato-triangularis, 5 mm longis, 2.5 mm latis; vexillo costato dorso leviter carinato; labello saccato, rubro-striato, inferne in calcar breve 5 mm longum incurvum subto constricto attenuato facile differt.

Herba annua, 25 cm alta. Caulis erectus, ramosus, gracilis, angulatus, glaber. Folia alterna, chartacea, ovata usque elliptica, (1)–1.5–4 cm longa, (0.8)–1.5–2 cm lata, apice acuta, mucronata, basi cuneata, margine parce crenata, supra viridia, subtus pallide viridia, utrinque glabra, costa supra prominula, nervis lateralibus inconspicuis; petiolus 3–5 cm longus. Pedunculi solitarii ex axillis foliorum superiorum edentes, 1.8–2 cm longi, uniflori; pedicelli 1 cm longi, in medio bracteati; bractae lineares, 4 mm longae, acutae. Flores albi; sepalia lateralalia 2, ovato-triangularia, 5 mm longa, 2.5 mm lata, apice acuta, basi oblique leviter cordata; vexillum orbiculare, circ. 1 cm diam., apice leviter emarginatum, mucronatum, basi cordatum, dorso costatum leviter carinatum; alae circ. 2 cm longae, sessiles, bilobatae, lobo basali ovato-oblongo, apice acuto, distali oblongo, corc. 5 mm lato, eo basali 2.5-plo longiore, labellum saccatum, inferne in limbo 2 cm longo, 1.5 cm lato, rubro-striato, antice rostro 4 mm longo praedito, calcar 5 mm longo incurvo, subito constricto; ovarium fusiforme, 4 mm longum. Capsulae immaturae.

**Yunnan** (云南): fugong (福贡), Salwin-kiukiang Divide (怒江傈僳江分水岭), alt. 3 200–3 400 m, margine bamboo thickets, 1938–9–14, Yü Te-Jun (俞德浚) 20249 (Holotypus, KUN).

本种近德浚凤仙花 (*I. yui* S. H. Huang), 但本种花白色, 萼片 2, 较小, 卵状三角形, 长 5 mm, 宽 2.5 mm, 旗瓣背面中肋稍龙骨状突起, 唇瓣囊状, 有红色条纹, 距短, 长约 5 mm, 易区别。

## 3 德钦凤仙花 新种 图 2: 8–15

*Impatiens deqinensis* S. H. Huang sp. nov.

Species haec habitu *I. delavayi* Franch. similis, sed a qua foliis ovatis usque ellipticis, margine serratis, petiolis brevioribus, pedunculis brevioribus, 2–3 floribus, bracteis persistentibus; labello anguste infundibulari, calcari brevi, ad extremum sagittato facile differt.

Herba succulenta, 50–60 cm alta. Caulis robustus, ramosus, basi 1 cm diam., glaber. Folia alterna, chartacea, ovata usque ovato-elliptica, 2–5.5 cm longa, 0.8–2.5 cm lata, apice acuminata, basi late cuneata vel obtusa, glandulis stipitatis 1–2-paribus instructa, margine serrata, glanduloso-mucronata, supra viridia, subtus pallide viridia, utrinque subglabra, nervis lateralibus 5–7-paribus; petiolus brevis, 2.5 mm longus. Pedunculi ex axillis foliorum edentes, 1–1.5 cm longi, 2–3-flori (rare 4–5-flori); pedicelli 1–1.2 cm longi, ad fructus leviter elongati, apice

bracteati ; bracteae ovatae , 2.5 mm longae , apice mucronatae , persistentes. Flores flavi , purpureo-maculati ; sepala lateralialia 2 , oblique ovata , 4-5 mm longa et lata , 3-5-nervia , apice mucronata ; vexillum oblatum , 8 mm longum , 11 mm latum , apice obtusum , basi leviter emarginatum ; costa dorso leviter incrassata ; alae bilobatae , circ. 1.7 cm longae , lobo basali ovato , purpureo , apice rotundato , distali dolabriformi , eo basali 2.5-plo longiore , apice obtuso , basi purpureo ; dorsaliter auricula inconspicua ; labellum infundibulare , inferne in 5-6 mm longum incurvum attenuatum ad extremum sagittatum , limbo 1.2 cm longo , 1.2 cm lato , stamina 6.5 mm longa , filamentis filiformibus , antheris obtusis ; ovarium lineare , circ. 6 mm longum , glabrum. Capsulae immaturae , lineari-cylindricae , circ. 2 cm longae.



图2 1~7. 大关凤仙花, 1. 植株; 2. 侧生萼片; 3. 旗瓣 (侧面观); 4. 翼瓣; 5. 唇瓣; 6. 花丝及花药; 7. 子房; 8~15. 德钦凤仙花; 8. 植株; 9. 侧生萼片; 10. 旗瓣; 11~12. 翼瓣; 13. 唇瓣; 14. 花丝及花药; 15. 子房。(吴锡麟绘)

Fig. 2 1-7. *Impatiens daguangensis* S. H. Huang, 1. Plant; 2. Lateral sepal; 3. Standard; 4. Wing; 5. Lip; 6. Filaments & anthers; 7. Ovary; 8-15. *Impatiens deqinensis* S. H. Huang, 8. Plant; 9. Lateral sepal; 10. Standard; 11-12. Wing; 13. Lip; 14. Filaments & anthers; 15. Ovary. (Darwn by Wu Xi-Lin)



图3 1~7. 文山凤仙花；1. 植株；2. 侧生内、外萼片；3. 旗瓣；4. 翼瓣；5. 唇瓣；6. 子房；  
7. 花丝及花药；8~13. 怒江凤仙花；8. 植株；9. 侧生萼片；10. 旗瓣；  
11. 翼瓣；12. 唇瓣；13. 子房。（吴锡麟绘）

Fig. 3 1-7. *Impatiens wenshanensis* S. H. Huang, 1. Plant; 2. Outer sepal & Inner sepal; 3. Standard; 4. Wing;  
5. Lip; 6. Ovary; 7. Filaments & anthers; 8-13. *Impatiens salweenensis* S. H. Huang, 8. Plant;  
9. Lateral sepal; 10. Standard; 11. Wing; 12. Lip; 13. Ovary. (Darwn by Wu Xi-Lin)

**Yunnan (云南):** Deqin (德钦), alt. 3 680 m 1983-9-12, Zhu Wei-Ming *et al.* (朱维明等) 17333 (Holotypus, YUKU); Zhongdian (中甸), Dongbazi (东坝子), 1939-9-4, Feng Guo-Mei (冯国楣) 2297 (KUN).

本种近耳叶凤仙花 (*I. delavayi* Franch.), 但叶卵形至卵状椭圆形、边缘具锯齿, 叶柄短; 总花梗短, 具2~3花, 苞片宿存, 唇瓣狭漏斗形, 距短、先端箭头状易区别。

4 德浚凤仙花 新种 图 4：1~7

*Impatiens yui* S. H. Huang sp. nov.

Species haec habitu *I. saluinensis* S. H. Huang similis, sed a qua floribus roseolis vel purpurascenscentibus; sepalis lateralibus 2, oblique late ovatis, 1 cm longis, 0.8 cm latis; extus et margine pilosis; vexillo oblato, apice rostro, dorso costato leviter carinato; labello saccato-infundibulari cum calcar 3.5–4 cm longo facile differt.

Herba annua, 25–50 cm alta. Caulis erectus, robustus, 1 cm diam., ramosus, angulatus, puberulus, basi radicibus fibrosis numerosis praeditus. Folia alterna, chartacea, ovato-oblonga vel ovato-elliptica, 9–14 cm longa,



图 4 1~7. 德浚凤仙花；1. 植株；2. 侧生萼片；3. 旗瓣；4. 翼瓣；5. 唇瓣；6. 花丝及花药；7. 子房；8~14. 片马凤仙花；8. 植株；9. 侧生萼片；10. 旗瓣；11. 翼瓣；12. 唇瓣；13. 花丝及花药；14. 子房。（吴锡麟绘）

Fig. 4 1–7. *Impatiens yui* S. H. Huang, 1. Plant; 2. Lateral sepal; 3. Standard; 4. Wing; 5. Lip; 6. Filaments & anthers; 7. Ovary; 8–14. *Impatiens pianmaensis* S. H. Huang, 8. Plant; 9. Lateral sepal; 10. Standard; 11. Wing; 12. Lip; 13. Filaments & anthers; 14. Ovary. (Darwn by Wu Xi-Lin)

2.5–5 cm lata, apice acuminata, basi attenuata, margine crenis parvis mucronatis praedita, supra viridia, glabra, subtus virella, secus nervos puberula, nervis lateralibus 5–7-paribus; petiolus 0.5–3 cm longus. Pedunculi ex axillis foliorum superiorum edentes, 1 cm longi, 2-flori; pedicelli 1.2–1.5 cm longi, prope partem superiorem bracteati; bractae ovato-lanceolatae, circ. 3.5 mm longae, puberulae, caducae. Flores roseoli, vel purpurascens; sepala lateralialia 2, oblique late ovata, circ. 1 cm longa, 0.8 cm lata, apice mucronata, basi leviter angusta, extus et margine pilosa; vexillum oblatum, 7 mm longum, 11 mm latum, apice rostrum, dorso costatum leviter carinatum; alae sessiles, bilobatae, lobo basali ovato, apice obtuso, distali dolabriformi, apice acuto; dorsaliter auricula minore; labellum saccato-infundibulare, cum calcar 3.5–4 cm longum, limbo obliquo, (2.7–3 cm longo) 1.5 cm lato, antice mucronato, calcar incurvo attenuato, ad extremum acuto; stamina 6 mm longa, filamentis filiformibus, antheris obtusis; ovarium lineare, 4–5 mm longum. Capsulae lineari-cylindricae, 3–4 cm longae, apice acutae.

**Yunnan**(云南): Gongshan(贡山), Dulongjiang(独龙江), alt. 1 800 m, mixed forest, 1938–8–27, Yü De-Jun(俞德浚) 19964( Holotypis, KUN); Cikai(茨开), Heipushan(黑普山), 1940–10–6, Feng Guo-Mei(冯国楣) 8216( KUN).

本种近怒江凤仙花( *I. salwinensis* S. H. Huang), 但花粉红色或淡紫色, 侧生萼片 2, 偏斜宽卵形, 长 1 cm, 宽 0.8 cm, 外面及边缘被疏柔毛; 旗瓣扁圆形, 先端具喙, 背面中肋稍龙骨突起, 唇瓣囊状漏斗形, 连距长 3.5~4 cm, 易区别。

## 5 片马凤仙花 新种 图 4: 8~14

*Impatiens pianmaensis* S. H. Huang sp. nov.

Species haec habitu *I. begonifoliae* S. Akiyamae et H. Ohba similis, sed a qua floribus viridi-albis, minoribus; vexillo oblato, viridi, apice mucronato; lobo distali alae oblongo, dorsaliter ex ausiculato facile differt.

Herba annua, 60 cm alta. Caulis erectus, ramosus, angulatus, glaber, basi radicibus fibrosis numerosis instructus. Folia alterna, chartacea, ovato-oblonga vel elliptica, 6–11 cm longa, 2–4.5 cm lata, apice caudata, basi cuneata, leviter oblique, interdum basi glandulis globosis 2 praedita margine crenata, inter crenas mucronata, supra viridia, parce albo-puberula, vel glabra, subtus virella, glabra, costa subtus prominenti, nervis lateralibus multijugis; petiolus raepe 0.2–1.2 cm longus, superus subsessilis. Pedunculi ex axillis foliorum superiorum edentes, graciles, 2–4 cm longi, 1–2-flori; pedicelli graciles, 2.5 cm longi, prope apicem bracteati; bractae lineares, 2 mm longae, virides. Flores minores, viridi-albi, 1.5 cm expansi; sepala lateralialia 2, ovato-lanceolata, viridia, leviter obliqua; 3–3.5 m longa, 1.5–2 mm lata; vexillum oblatum, viride, 5 mm longum, 7 mm latum, apice mucronatum, dorso costatum leviter anguste cristatum; alae bilobatae, stipitatae, 1.8 cm longae, lobo basali ovato, apice obtuso, distali oblongo, eo basali 2.5-plo longiore, apice attenuato, leviter acuto, dorsaliter exausiculato; labellum cymbiforme, 3.5 mm longum, 6 mm latum, antice, rostro viridi 2.5 mm longo praeditum, inferne in calcar 1.8 cm longum attenuatum, ad extremum obtusum; stamina 4 mm longa, filamentis filiformibus, antheris obtusis; ovarium oblongum, 3 mm longum, apice acutum. Capsulae immaturae lineares.

**Yunnan**(云南): Lushui(泸水), Pianma(片马), alt. 2 300 m, 1964–7–15, Wu Su-Gong(武素功) 8060( Holotypus, KUN).

本种近秋海棠叶凤仙花( *I. begonifolia* S. Akyama et H. Ohba), 但花较小, 绿白色, 旗瓣扁圆形, 绿色, 先端具小尖头, 翼瓣上裂片长圆形, 背面无耳易区别。

## 6 文山凤仙花 新种 图 3: 1~7

*Impatiens wenshanensis* S. H. Huang sp. nov.

Species haec habitu *I. argutae* Hook. f. et Thoms. similis, sed a qua floribus flavis, sepalis exteroribus 2, oblique late ovatis, margine 2–3 aristato-dentatis; vexillo flabelliformi; labello profunde saccato, inferne in calcar breve attenuato facile differt.

Herba annua, 20–100 cm alta. Caulis erectus, circ. 4 mm diam., glaber, angulatus. Folia alterna, chartacea, elliptica vel oblongo-elliptica, 9–15 cm longa, 2.5–4.5 cm lata, apice acuminata, vel caudata, basi cuneata, glandulis stipitatis 1–2-paribus instructa, margine crenata, supra valde parce puberula, subtus glabra, nervis lateralibus 6–7-paribus, arcuatis; petiolus 2–5.5 (–7) cm longus, glaber. Pedunculi ex axillis foliorum superiorum edentes, 4–5 cm longi, 1–2-flori; pedicelli 2.5–3 cm longi, basi bracteati: bractee ovato-lanceolatae, 3 mm longae. Flores magni, flavi cum calcar 4–5 cm longi; sepal lateralalia 4, quorum 2 exteriora, late ovata, oblique, 1.2 cm longa, 0.8 cm lata, apice apiculata, basi cordata, margine 2–3 aristato-dentata vel integra, costa prominata, 2 interiora, linearia, 1.8 cm longa, 1.5 mm lata, apice acuminata; vexillum flabelliforme, 2 cm longum, superne 2.5 cm latum, apice emarginatum, costatum dorso carinatum; alae 2.5–3 cm longae, bilobatae, lobo basali late ovato, apice obtuso vel emarginato, distali dolabriformi, apice obtuso, emarginato, eo basali 1.5-plo longiore, 1.4 cm lato, dorsaliter auricula inconspicua; labellum profunde saccatum, flavum, purpureo-striatum, 2.5–3 cm longum, 2 cm latum, antice rostratum, inferne in calcar breve 5–6 mm longum incurvum attenuatum; stamina 7.5 mm longa, filamentis linearibus, 6 mm longis, antheris ovoideis, apice acutis; ovarium fusiforme, leviter recurvum, 6 mm longum, apice acutum. Capsulae immatures.

**Yunnan (云南):** Wenshan (文山), Laojunshan (老君山), alt. 1 820 m, 1992–9–23, Shui Yu-Min (税玉民) 0254 (Holotypus, YUKU); ibid. alt. 2 200 m, Shui Yu-Min (税玉民) 0238, 003294, 003220 (YUKU).

本种近锐齿凤仙花 (*I. arguta* Hook. f.), 但本种外萼片宽卵形, 偏斜, 边缘常具 2~3 个芒状齿, 旗瓣扇形, 唇瓣深囊状, 距短易区别。

## 7 老君山凤仙花 新种 图 5: 1~7

*Impatiens laojunshanensis* S. H. Huang sp. nov.

Species haec habitu *I. cuonaensis* Y. L. Chen similis, sed a qua floribus majoribus; vexillo costato dorso leviter prominenti, lobo basali alae ovato, apice acuto, non capillari; labello infundibulari, inferne in calcar breve incurvo attenuato facile differt.

Herba annua, 30–100 cm alta. Caulis erectus, ramosus, angulatus, glaber, basi radicibus fibrosis numerosis instructus. Folia alterna, membranacea, elliptica vel ovato-elliptica, 4–10 cm longa, 2–3.5 cm lata, apice caudato-acuminata, basi late cuneata, glandulis stipitatis 1–2-paribus instructa, margine crenato-serrata, crenis mucronatis, supra viridia, valde parce albo-puberula, vel glabra, subtus virella, secus nervos parce puberula, vel glabra, nervis lateralibus 4–6-paribus; petiolus (0.5–) 1.5–4 cm longus. Pedunculi solitarii ex axillis foliorum edentes apice, 1-flori; pedicelli graciles, 1–1.5 cm longi, in medio bracteati; bractee lineares, saepe deciduae. Flores flavi vel viridi-flavi, 2–2.5 cm longi; sepal lateralalia 2, late ovata, circ. 8 mm longa, 6 mm lata, apice mucronata, basi subcordata, nervis numerosis; vexillum ellipticum, 1 cm longum, 0.6 cm latum, apice acutum, basi attenuatum, costatum costa dorso leviter incrassata; alae sessiles, 1.1 cm longae, bilobatae, lobo basali ovato, apice acuto, distali anguste oblongo, apice obtuso; labellum infundibulare, 1.4 cm longum, 1.2 cm latum, inferne in calcar breve, circ. 4 mm longum incurvum attenuatum; stamina 6 mm longa, filamentis linearibus, 3.5–4 mm longis, antheris ovoideis, apice obtusis; ovarium lineare, 4–5 mm longum, apice rostellatum. Capsulae immaturae, lineares, 2–2.5 cm longae.

**Yunnan (云南):** Wenshan (文山), Laojunshan (老君山), alt. 1 830 m, 1992–9–25, Shui Yu-Min (税玉民) 3115 (Holotypus, YUKU); ibid. Shui Yu-Min (税玉民) 0296; 0360 (YUKU).





图 5 1~7. 老君山凤仙花；1. 植株；2. 侧生萼片；3. 旗瓣；4. 翼瓣；5. 唇瓣；6. 子房；7. 花丝及花药；  
8~14. 孙氏凤仙花；8. 植株；9. 侧生萼片；10. 旗瓣；11. 翼瓣；12. 唇瓣；  
13. 花丝及花药；14. 子房。（吴锡麟绘）

Fig. 5 1-7. *Impatiens laojunshanensis* S. H. Huang, 1. Plant; 2. Lateral sepal; 3. Standard; 4. Wing; 5. Lip; 6. Ovary; 7. Filaments & anthers; 8-14. *Impatiens sunii* S. H. Huang, 8. Plant; 9. Lateral sepal; 10. Standard; 11. Wing; 12. Lip; 13. Filaments & anthers; 14. Ovary. (Darwn by Wu Xi-Lin)

本种近错那凤仙花（*I. cuonaensis* Y. L. Chen），但本种花较大，旗瓣背面中肋稍突起，翼瓣基裂片卵形，先端锐尖而非毛发状，唇瓣漏斗形，距短而异。

8 麻栗坡凤仙花 新种 图 6：8~15

*Impatiens malipoensis* S. H. Huang sp. nov.

Species haec habitu *I. apalophyllae* Hook. f. affinis, sed a qua floribus albis; sepalis lateralibus 4, quorum 2

exterioribus ovato-lanceolatis , 2 interioribus , linearibus ; vexillo costato , costa ad medium leviter carinata ; labello sac-  
cato-infundibulari , calcaris brevioris , antheris leviter acutis , facile differt.



图 6 1~7. 版纳凤仙花; 1. 植株; 2. 侧生萼片; 3. 旗瓣 (侧面观); 4. 唇瓣; 5. 花丝及花药; 6. 子房;  
7. 蒴果; 8~15. 麻栗坡凤仙花; 8. 植株; 9. 外萼片; 10. 内萼片; 11. 旗瓣 (侧面观); 12. 翼瓣;  
13. 唇瓣; 14. 花丝及花药; 15. 子房。(吴锡麟绘)

Fig. 6 1-7. *Impatiens bannaensis* S. H. Huang , 1. Plant ; 2. Lateral sepal ; 3. Standard ; 4. Lip ; 5. Filaments  
& anthers ; 6. Ovary ; 7. Capsul ; 8-15. *Impatiens malipoensis* S. H. Huang , 8. Plant ; 9. Outer sepal ;  
10. Inner sepal ; 11. Standard ; 12. Wing ; 13. Lip ; 14. Filaments & anthers ; 15. Ovary. ( Darwn by Wu Xi-Lin )

Herba annua , 70 cm alta . Caulis erectus , ramosus , angulatus , glaber . Folia alterna , chartacea , ovata usque  
elliptica vel oblonga , 4.5 - 11.5 cm longa , 2.5 - 4.5 cm lata , apice acuminata , basi late cuneata vel obtusa , mar-  
gine crenata , crenis mucronatis , supra intense viridia , subtus pallide viridia , subglabra , nervis lateralibus 5 - 9- pari-  
bus ; petiolus 2 - 3.5 cm longus , circ. 1.5 mm diam . Pedunculi ex axillis foliorum superiorum , 3 - 3.5 cm longi , 2

– 3-flori; pedicelli 1.5 – 2.5 cm longi, prope basin bracteati; bractee ovato-lanceolatae, 5 mm longae, basi 2 mm latae. Flores majores, albi, 3 – 3.5 cm longi; sepala lateralalia 4, quorum 2 exteriora, apice mucronat, conspicue costata, basi obtusa, ovato-lanceolata, leviter obliqua, viridia, 8 mm longa, 4 mm lata, 2 interiora, linearia, 13 mm longa, 2 mm lata, alba; vexillum obcordatum, 2 cm longum, 1.5 cm latum, apice, mucronatum, basi attenuatum, costatum costa ad medium leviter carinata; alae subsessiles, bilobatae, 2.5 – 3 cm longae, lobo basali ovato-oblongo, apice acuto, distali oblongo, apice leviter acuto; dorsaliter lunato-auriculato, reflexa; labellum saccato-infundibulare, limbo 2.5 cm lato, 3 cm longo, obliquo, antice mucronato, calcar 0.8 – 1 cm longo attenuato incurvo, ad extremum acuto; stamina 7.5 mm longa, filamentis filiformibus, antheris leviter acutis; ovarium fusiforme, 5 mm longum, apice acutum, basi attenuatum. Capsulae clavatae, circ. 1.2 cm longae, apice 4 mm latae, versus basin attenuatae, seminibus 1 – 2.

**Yunnan** (云南): Malipo (麻栗坡), Yunling gongshe (云岭公社), alt. 1 400 m, in forest, 1964 – 1 – 24, Wu Quan-An (武全安) 9883 (Holotypus, KUN).

本种近大叶凤仙花 (*I. apalophylla* Hook. f.), 但本种花白色, 侧生萼片 4, 外萼片 2, 卵状披针形, 内萼片 2, 线形, 旗瓣背面中肋稍龙骨状突起, 唇瓣囊状漏斗形距较短, 花药稍尖易区别。

## 9 版纳凤仙花 新种 图 6: 1 ~ 7

*Impatiens bannaensis* S. H. Huang sp. nov.

Species haec habitu *I. mengtzeanae* Hook. f. similis, sed a qua pedunculis brevioribus, 2 – 3-floribus; labello cymbiformi; vexillo costato, dorso anguste cristato, apice uncato-rostrato facile differt.

Herba succulenta, 30 – 80 cm alta. Caulis erectus, robustus, circ. 5 mm diam., ramosus, leviter angulatus, glaber. Folia alterna, elliptica usque oblonga, 6.5 – 16.5 cm longa, 3 – 6.5 cm lata, apice acuminata, basi cuneata, glandulis stipitatis 1-paribus instructa, margine crenata, inter crenas setiformiter mucronata, supra viridia, glabra, subtus virella, parce albo-puberula vel subglabra, nervis lateralibus 9 – 11-paribus; petiolus 2 – 4 cm longus, superus brevis, circ. 0.5 mm longus, prope apicem glandulis conicis praeditus. Pedunculi ex axillis foliorum edentes, circ. 8 mm longi, 2 – 3-flori; pedicelli 1 – 1.5 cm longi, basi bracteati; bractee lineari-lanceolatae, 3.5 mm longae, apice acutae. Flores roseoli; sepala lateralalia 2, ovato-oblonga, 0.8 – 1 cm longa, apice acuta, aristata, basi obtusa, margine 2 – 3 glandulo-serrata; vexillum ellipticum, 1.5 cm longum, 1 cm latum, costatum dorso anguste cristatum, apice uncato-rostratum; labellum cymbiforme, limbo circ. 1.8 cm lato, 5 mm longo, calcar 3 cm longo leviter incurvo, ad extremum acuto; stamina 7.5 mm longa, filamentis filiformibus, antheris acutis; ovarium falcatum, circ. 8 mm longum, apice rostratum. Capsulae lineari-cylindricae, 1.2 cm longae, dense albo-puberulae.

**Yunnan** (云南): Xishuangbanna (西双版纳), Menglun (勐仑), Kongmingshan (孔明山), alt. 1 300 m, 1959 – 9 – 15, Pei-Sheng-Ji (裴盛基) 59 – 10175 (Holotypus, KUN).

本种近蒙自凤仙花 (*I. mengtzeana* Hook. f.), 但本种总花梗短, 具 2 ~ 3 花, 唇瓣舟状, 旗瓣背面中肋有狭鸡冠状突起, 先端具钩状的喙而异。

## 10 杏黄凤仙花 新种 图 7: 1 ~ 7

*Impatiens armeniaca* S. H. Huang sp. nov.

Species haec habitu *I. erubescens* Dunn similis, sed a qua floribus aurantiacis, inferne purpureis; sepalis lateralibus 2, late ovatis. Foliis late ovatis vel ovato-ellipticis facile differt.

Herba succulenta, 35 – 50 cm alta. Caulis erectus, robustus, angulatus, 8 – 10 mm diam., puberulus, basi radicibus fibrosis numerosis praeditus. Folia alterna, ovato-elliptica vel late ovata, 4.5 – 17.5 cm longa, 2.5 – 11 cm lata,

apice acuta, basi cuneata vel obtusa, margine crenata, inter crenas setulosa vel exetulosa, supra viridia, puberula vel subglabra, subtus pallide viridia, secus nervos puberula, nervis lateralibus 7-9-paribus; petiolus 1-5 cm longus, prope apicem glandulis stipitatis 1-paribus praeditus. Pedunculi ex axillis foliorum superiorum edentes 3.5-10 cm longi, 2-3-flori; pedicelli 1.6-1.8 cm longi, basi bracteati; bractee lineares, 3 mm longae. Flores aurantiaci, inferne purpurei; sepalalateralia 2, late ovata, oblique, 1-1.2 cm longa, 8-9 mm lata, apice mucronata, nervosa; vexillum orbiculare, apice emarginatum. 1.2-1.3 cm diam., costatum dorso ad medium leviter cristatum; alae 3 cm longae, bilobatae, lobo basali ovato, apice obtuso, distali oblongo-dolabriformi, apice obtuso, eo basali 2-plo longiore,

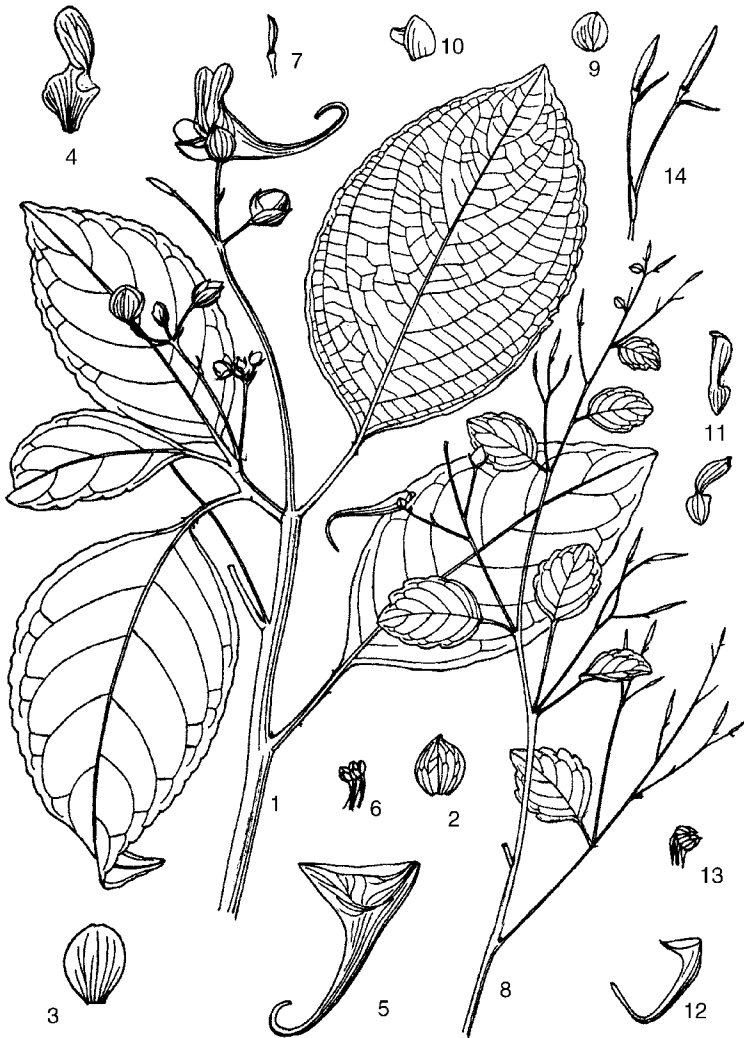


图7 1-7. 杏黄凤仙花; 1. 植株; 2. 侧生萼片; 3. 旗瓣; 4. 翼瓣; 5. 唇瓣; 6. 花丝及花药; 7. 子房;  
8-14. 永善凤仙花; 8. 植株; 9. 侧生萼片; 10. 旗瓣(侧面观); 11. 翼瓣; 12. 唇瓣;  
13. 花丝及花药; 14. 蒴果。(吴锡麟绘)

Fig. 7 1-7. *Impatiens armeniaca* S. H. Huang, 1. Plant; 2. Lateral sepal; 3. Standard; 4. Wing; 5. Lip;  
6. Filaments & anthers; 7. Ovary; 8-14. *Impatiens yongshanensis* S. H. Huang, 8. Plant; 9. Lateral sepal;  
10. Standard; 11. Wing; 12. Lip; 13. Filaments & anthers; 14. Capsul. (Darwn by Wu Xi-Lin)

dorsaliter reflexo suborbiculari auriculato; labellum infundibulare, limbo 1.2 cm longo, 2 cm lato, antice mucronato, calcar 2.5–3 cm longo incurvo attenuato; stamina 7.5 mm longa, filamentis filiformibus, antheris obtusis; ovarium fusiforme, leviter incurvum, 6 mm longum, apice acutum. Capsulae immatures.

**Yunnan (云南):** Ying jiang (盈江), Xima (昔马), alt. 950 ~ 1 220 m, 1985–8, Zhu Wei-Ming *et al.* (朱维明等) 10554 (Holotypus, YUKU).

本种近变红凤仙花 (*I. erubescens* Dunn), 但本种花桔黄色, 下部紫色, 侧生萼片 2, 宽卵形; 叶片宽卵形或卵状椭圆形, 易区别。

## 11 孙氏凤仙花 新种 图 5: 8 ~ 14

*Impatiens sunii* S. H. Huang sp. nov.

Species haec habitu *I. piufanensis* Hook. f. similis, sed a qua foliis crasso-chartaceis, margine grosse triangulo-serratis; sepalis lateralibus ovato-oblongis, leviter crassis, apice acuminatis; vexillo orbiculari, apice uncato-rostrato, costa dorso angusto-alato facile differt.

Herba annua, 30–50 cm alta. Caulis erectus, ramosus, angulatus, glaber. Folia alterna, crasso-chartacea, elliptica, 9.5–15 cm longa, 3.3–7.5 cm lata, apice acuminata vel caudata, basi late cuneata, margine parce grosse triangulato-serrata, supra intense viridia, subus pallide viridia, utrinque glabra, nervis lateralibus 5–7–(9)-paribus; petiolus primum 0.7–3 cm longus, inferus longior, superus subsessilis. Pedunculi ex axillis foliorum superiorum edentes, solitarii vel 2–3 fasciculati, 5–6 cm longi, graciles, (1)–2–3-flori; pedicelli 1.5–3 cm longi, basi bracteati; bractee lanceolatae, 6 mm longae, apice acuminatae, glabrae. Flores flavi, 2.5–3 cm longi; sepala lateralia 2, ovato-oblonga, leviter crassa, 12 mm longa, 5 mm lata, apice acuminata, basi obtusa, nervis 7; vexillum orbiculare vel oblatum, 13–14 mm diam., apice uncato-rostratum, basi leviter cordatum, dorso costatum, anguste alatum; alae 2.3 cm longae, lobo basali orbiculari, apice rotundato mucronato, distali dolabriformis, eo basali 2-plo longiore, dorsaliter auricula lunata praedito; labellum infundibulare, limbo 12 mm longo, 17 mm lato, antice rostrato, calcar 14 mm longo incurvo subito constricto, ad extremum leviter emarginato; stamina 7 mm longa, filamentis linearibus, 5.5 mm longis, antheris acutis; ovarium lineare, 5 mm longum, apice acutum. Capsulae immaturae, lineares, 2 cm longae.

**Yunnan (云南):** Daguan (大关), Sanjiangkou (三江口), alt. 900 m, 1973–6–10, Sun Bi-Xing (孙必兴) 0036958 (Holotypus, YUKU).

本种近节块凤仙花 (*I. piufanensis* Hook. f.), 但本种叶厚纸质, 边缘具三角状粗齿, 侧生萼片卵状长圆形, 稍厚, 先端渐尖, 旗瓣圆形, 先端有钩状的喙, 背面中肋具狭翅易区别。

## 12 大关凤仙花 新种 图 2: 1 ~ 7

*Impatiens daguanensis* S. H. Huang sp. nov.

Species haec habitu *I. nobilis* Hook. f. similis, sed a qua floribus roseolis; sepalis lateralibus oblique late ovatis vel suborbicularibus, cucullato-incurvatis, vexillo costato dorso bicorni-prominenti; alis longioribus facile differt.

Herba annua, 50–60 cm alta. Caulis erectus, ramosus, angulatus, glaber. Folia alterna, saepe versus apicem caulis conferta, membranacea, oblongo-lanceolata, 7–12.5 cm longa, 2.5–3.5 cm lata, apice acuminata, vel caudata, basi cuneata, attenuata, margine crenis mucronatis instructa, supra viridia, parce albo-puberula, subtus virella, subglabra; petiolus valde brevis vel subsessilis. Pedunculi ex axillis foliorum superiorum edentes, 6.5–10 cm longi, graciles, glabri, 2-flori; pedicelli 5–10 mm longi, ad fructus elongati, basi bracteati; bractee ovato-lanceolatae, 2 mm longae, apice mucronatae. Flores majores, roseolli, sepala lateralia 2, valde oblique late ovata vel sub-

orbicularia, cucullato-incurvata, 7–8 mm longa et lata, apice mucronata, basi obtusa, nervis numerosis, purpureo-viridibus; vexillum orbiculare, 1.5 cm diam., apice emarginatum, costa dorso carinata, bicorni-prominenti; alae subsessiles, 2.5 cm longae, lobo basali ovato, apice leviter acuto, distali oblongo, eo basali 2-plo longiore, dorsaliter auricula sublunata praedito; labellum saccatum, calcar 1 cm longo incurvo, ad extremum bifido attenuato; limbo 1.7 cm longo, 1.5 cm lato, antice mucronato; stamina 6.5 mm longa, filamentis linearibus, antheris acutis; ovarium lineare, 4 mm longum. Capsulae lineari-cylindricae, 2 cm longae.

**Yunnan(云南):** Daguan(大关), Mugan(木杆), sanjiangkou forestry(三江口林场), alt. 1700 m, 1991–9, Wu Su-Gong(武素功)0832(Holotypus, KUN); ibid. alt. 1750 m, 1987–9–13, Xiangliao exped. (香料考察队)870673(KUN).

本种近高贵凤仙花(*I. nobilis* Hook. f.), 但本种花粉红色, 侧生萼片偏斜宽卵形或近圆形, 内侧兜状内折, 旗瓣背面中肋有2角状突起, 翼瓣较长而异。

### 13 永善凤仙花 新种 图7:8~14

*Impatiens yongshanensis* S. H. Huang sp. nov.

Species haec habitu *I. thiochroae* Hand.-Mazz. similis, sed a qua foliis minoribus, ovatis, subsessilibus, racemis 2–3-floribus; sepalis lateralibus late ovatis vel suborbicularibus, leviter obliquis; vexillo costato dorso cristato facile differt.

Herba annua, 60 cm alta. Caulis erectus, ramosus, angulatus, glaber. Folia alterna, membranacea, ovata, 1–2.5 cm longa, 0.8–1.5 cm lata, apice leviter acuta vel obtusa, basi late cuneata vel leviter oblique cordata, margine crenata, supra viridia, subtus virella, utrinque glabra, nervis lateralibus inconspicuis; petiolus 1 cm longus, superus subsessilis. Pedunculi ex axillis foliorum edentes, 1.5 cm longi, graciles, glabri, 2–3-flori; pedicelli graciles, 0.8–1 cm longi, prope apicem bracteati; bractee lineares, 2 mm longae, glabrae. Flores minores, flavi; sepala lateralibus 2, late ovata vel suborbicularia, leviter oblique, 2.5–3 mm longa et lata, apice leviter acuta, basi leviter obtusa, costa dorso prominula; vexillum suborbiculare, 4.5 mm diam., costatum dorso ad medium cristatum; alae sessiles, 1 cm longae, bilobatae, lobo basali ovato-oblongo, apice leviter acuto, distali lineari-oblongo, eo basali 2-plo longiore, apice acuto, dorsaliter auricula parva praedito; labellum cymbiforme, calcar 1.7 cm longo leviter incurvo limbo 5 mm lato, stamina 4 mm longa, filamentis linearibus, antheris leviter acutis; ovarium lineare, 3.5–4 mm longum. Capsulae lineares vel subfusiformes, apice acuminatae, basi leviter angustae, 2 cm longae, ad medium 2.5 mm latae, seminibus 2–3.

**Yunnan(云南):** Yongshan(永善), Manan(马楠), alt. 2450 m, 1960–8. Yunnan Northeast Exped. (滇东北考察队)661(Holotypus, KUN).

本种近硫色凤仙花(*I. thiochroa* H.-M.), 但叶较小, 卵圆形, 近无柄; 总状花序2~3花, 侧生萼片宽卵形或近圆形, 稍偏斜, 旗瓣背面中肋有鸡冠状突起, 易区别。

### 14 绥江凤仙花 新种 图8:1~7

*Impatiens suijiangensis* S. H. Huang sp. nov.

Species haec habitu *I. tenuibracteatae* Y. L. Chen similis, sed a qua floribus minoribus, vexillo subquadrato vel orbiculari, cucullato, costato dorso leviter incrassato, labello anguste infundibulari, calcar 6 mm longo et stricto facile differt.

Herba annua, 50–80 cm alta. Caulis erectus, ramosus, angulatus. Folia alterna, chartacea, oblonga vel elliptica, 5.5–11 cm longa, 2.5–5.5 cm lata, apice caudato-acuminata, basi cuneata attenuata, glandulis stipitatis 1–2-paribus instructa, margine crenato-serrata, inter dentes setulosa supra viridia, subtus virella, utrinque glabra; petiolus (1.5–) 2.5–5 cm longus. Pedunculi ex axillis foliorum superiorum edentes, 1.5–4.5 cm longi, 3–5-flori.

ri. Flores minores, purpurei; pedicelli 3-5 mm longi; bractae lineari-lanceolatae, deciduae; sepala lateralialia 2, ovata, 4 mm longa, apice mucronata; vexillum subquadratum vel orbiculare, cucullatum, 4.5 mm longum, 4 mm latum, apice rotundatum, mucronatum, basi leviter cordatum costatum dorso leviter incrassatum, alae 8 mm longae, sessiles, bilobatae, lobo basali suborbiculari, apice acuto vel obtuso, distali lineari, apice acuto, eo basali subaequali; labellum anguste infundibulare cum caldari 1.2 cm longum, antice rostrato, caldari 6 mm longo stricto limbo 4 mm lato; stamina 3.5 mm longa, filamentis filiformibus, antheris obtusis; ovarium fusiforme, 2.5 mm longum, apice acutum. Capsulae immatures.

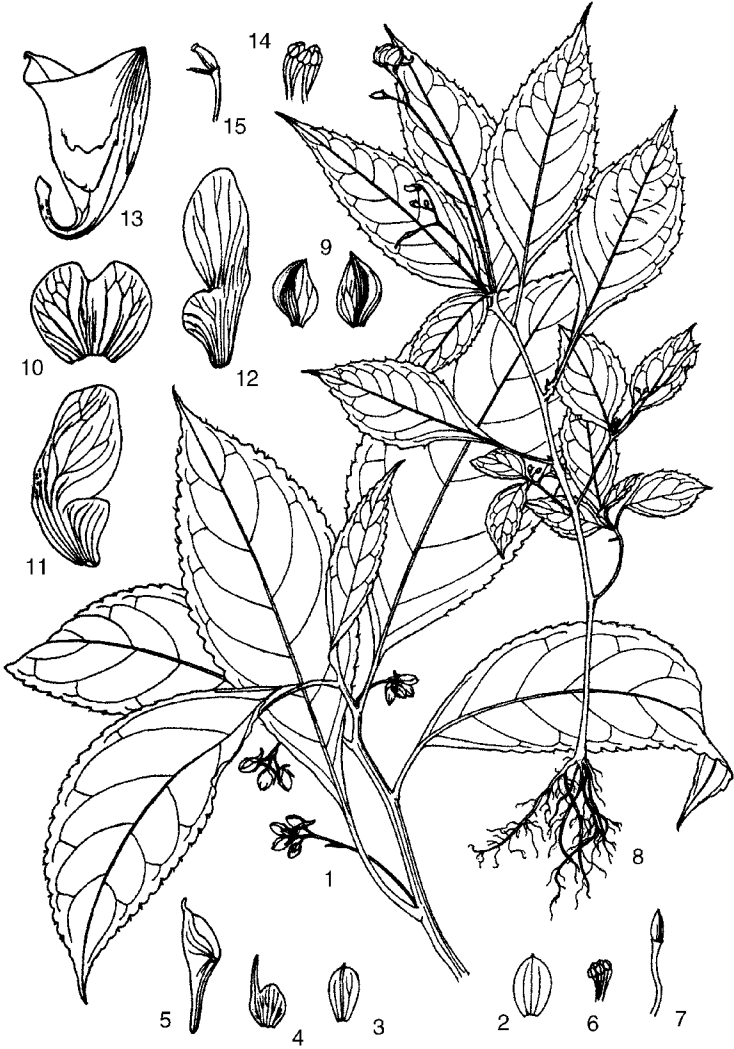


图 8 1~7. 绥江凤仙花; 1. 植株; 2. 侧生萼片; 3. 旗瓣; 4. 翼瓣; 5. 唇瓣; 6. 花丝及花药; 7. 子房;  
8~15. 紫溪凤仙花; 8. 植株; 9. 侧生萼片; 10. 旗瓣; 11~12. 翼瓣; 13. 唇瓣;  
14. 花丝及花药; 15. 子房。(吴锡麟绘)

Fig. 8 1-7. *Impatiens suijiangensis* S. H. Huang, 1. Plant; 2. Lateral sepal; 3. Standard; 4. Wing; 5. Lip;  
6. Filaments & anthers; 7. Ovary; 8-15. *Impatiens zixishanensis* S. H. Huang, 8. Plant; 9. Lateral sepal;  
10. Standard; 11-12. Wing; 13. Lip; 14. Filaments & anthers; 15. Ovary. (Darwn by Wu Xi-Lin)

**Yunnan** (云南): Suijiang (绥江), ershisigan (二十四杆), alt. 800 m, 1973 – 5, Sun Bi-Xing (孙必兴) 0040518 (Holotypus, YUKU).

本种近膜苞凤仙花 (*I. tenuibracteata* Y. L. Chen), 但花较小, 旗瓣近方形或圆形, 兜状, 背面中肋稍厚, 唇瓣狭漏斗形, 距长 6 mm 而直, 易区别。

## 15 紫溪凤仙花 新种 图 8: 8 ~ 15

*Impatiens zixishanensis* S. H. Huang sp. nov.

Species haec habitu *I. rubro-striatae* Hook. f. similis, sed a qua floribus flavis, purpureis striatis; sepalis lateralibus 2, oblique anguste ovatis, costis dorso lunato-cristatis; vexillo orbiculari, apice bilobato facile differt.

Herba annua, 40 – 60 cm alta. Caulis erectus, rare ramosus, angulatus, glaber. Folia alterna, saepe apicem caulis versus conferta, chartacea, ovata usque ovato-oblonga, 3.5 – 7.5 cm longa, 2 – 3 cm lata, apice acuminata vel caudata, basi cuneata attenuata, glandulis clavatis 1 – 2-paribus instructa, margine, crenis mucronatis praedita, supra intense viridia, parce albo-puberula, subtus virella, glabra, nervis lateralibus 4 – 5-paribus, subtus prominulis; petiolus saepe 1.5 – 2 cm longus, superus sessilis. Pedunculi ex axillis foliorum superiorum edentes, 2 – 5.5 cm longi, graciles, glabri, 2-multiflori; pedicelli 0.5 – 1 cm longi, graciles, glabri, ad fructus elongati circ. 1.5 cm longi, prope apicem bracteati; bractee lineares, 2.5 mm longae, caducae. Flores majores, flavi, purpureo-striati; sepala lateralalia 2, oblique, anguste ovata, flavida, 0.9 – 1 cm longa, 0.6 cm lata, apice mucronata, basi attenuata multinervia, dorso lunato-cristata, vexillum orbiculare, 1.5 cm diam., apice triangulato-bilobatum, ad medium purpureo-striatum; alae 2.5 cm longae, bilobatae, lobo basali suborbiculari, apice leviter acuto, purpureo-striato, distali late dolabriformi, eo basali 2.5-plo longiore, apice obtuso, prope basin purpureo-striato, dorsaliter paluo-auriculato; labellum saccatum, calcar 1 cm longo incurvo sabito, ad extremum sagitato constricto; limbo 2.5 cm longo, 1.5 cm lato, antice mucronato, flavo, purpureo-striato; stamina 6.5 mm longa, filamentis filiformibus, antheris obtusis; ovarium lineare, 3 mm longum. Capsulae lineari-cylindricae, circ. 2 cm longae. Semina elliptica, 2.5 mm longa, fusca, tuberculata.

**Yunnan** (云南): Chuxiong (楚雄), Zixishan (紫溪山), alt. 2 000 m, 1998 – 10, Chen Wen-Hong (陈文红) 0008 (Holotypus, KUN).

本种近红纹凤仙花 (*I. rubro-striata* Hook. f.), 但本种花黄色, 有紫色条纹, 侧生萼片偏斜狭卵形, 背面中肋有新月形鸡冠状突起, 旗瓣圆形, 先端二裂易区别。

## 16 滇南凤仙花 新种 图 1: 9 ~ 15

*Impatiens austroyunnanensis* S. H. Huang sp. nov.

Species haec habitu *I. holocentrae* Hand.-Mazz. similis, sed a qua sepalis lateralibus 2, minoribus, ovato-deltoides, leviter obliquis; labello anguste infundibulari, leviter obliquo facile differt.

Herba succulenta, 1.2 m alta. Caulis erectus, circ. 0.8 diam., ramosus, angulatus, glaber. Folia alterna, versus apicem caulis leviter conferta, membranacea, ovato-elliptica vel oblonga, 3 – 7 cm longa, 1.6 – 3 cm lata, apice caudato-acuminata, basi cuneata, glandulis stipitatis 2-paribus instructa, margine crenata, inter crenas setulosa, supra viridia, valde parce albo-puberula, vel glabra, subtus virella, subglabra, nervis lateralibus 5 – 7-paribus; petiolus 0.7 – 1.5 cm longus, glaber. Pedunculi ex axillis foliorum superiorum edentes, 3 – 4 cm longi, glabri, 2 – 5-flori. Flores flavi; pedicelli 0.5 – 1 cm longi, glabri, basi bracteati; bractee lineari-lanceolatae, circ. 3 mm longae, apice acutae; sepala lateralalia 2, ovato-deltoides, 4 mm longae, basi 2.5 mm lata, leviter inaequalialia, apice mucronata, nervis 3 – 5, costis leviter incrassatis; vexillum late ovatum usque orbiculare, 0.8 – 1 cm longum, 0.6 – 0.8



cm latum, apice mucronatum, basi rotundatum, costa dorso carinata; alae subsessiles, bilobatae, 2 cm longae, lobo basali ovato, apice obtuso, distali lineari-lanceolato, eo basali 2.5-plo longiore, apice acuminato, dorsaliter inconspicue auriculato; labellum anguste infundibulare, cum calcaribus circ. 2 cm longum, calcaribus stricto, ad extremum rotundato attenuato; limbo 0.8 cm lato, antice apiculato, stamina 4 mm longa, filamentis filiformibus, circ. 3 mm longis, antheris obtusis; ovarium lineare, circ. 3 mm longum, apice acutum, glabrum. Capsulae immaturae, lineari-cylindricae, circ. 2 cm longae, apice acutae.

**Yunnan (云南):** Wenshan (文山), Laojunshan (老君山), alt. 2 450 m, in forest, 1993-8-5, Shui Yu-Min (税玉民) 003306 (Holotypus, YUKU); Jinping (金平), Maandi (马鞍底), Wutaishan (五台山), alt. 2 400 ~ 2 700 m, in forest 1996-9-10, Wu Su-Gong *et al.* (武素功等) 3065, 3438, 3753 (KUN).

本种近同心凤仙花 (*I. holocentra* H.-M.), 但本种侧生萼片 2, 较小, 卵状三角形, 稍偏斜, 唇瓣狭漏斗形, 稍偏斜而异。

### 17 耳叶棒凤仙花 新变种 图 9: 1 ~ 8

*Impatiens claviger* Hook. f. var. *auriculata* S. H. Huang var. nov.

A typo recedit foliis majoribus, obovato-oblongis, inferne attenuatis, basi auriculatis, petiolis brevissimis; floribus aureis, purpureo-punctatis valde insignis.

**Yunnan (云南):** Funing (富宁), Lida (里达), alt. 900 m, in forest, 1964-8, Wu Quan-An (武全安) 9653 (Holotypus, KUN).

与原变种区别在于叶较大, 倒卵状长圆形, 下部渐狭, 基部耳状, 叶柄极短; 花金黄色, 有紫色斑点而异。

### 18 狭萼凤仙花 新种 图 9: 9 ~ 15

*Impatiens lancisepala* S. H. Huang sp. nov.

Species haec habitu *I. mengtzeanae* Hook. f. valde affinis, sed a qua floribus minoribus; sepalis lateralibus 2, lanceolatis; alis stipitatis; vexillo costato dorso ad medium cornuto-prominenti facile differt.

Herba perennis, 50 cm alta. Rhizoma breve, ad nodos radiculatum. Caulis erectus simplex, angulatus, cinereo-puberulus. Folia alterna, versus apicem caulis saepe conferta, inferne nuda; chartacea, ovata vel ovato-oblonga, 6-11 cm longa, 2.5-4 cm lata, apice acuta, basi cuneata, glandulis stipitatis 1-2-paribus instructa, attenuata, margine leviter mucronato-serrata, supra viridia, parce albo-puberula, subtus virella, secus nervos dense puberula; petiolus 1.5-2.5 cm longus, glandulis stipitatis 3-4 praeditus. Pedunculi ex axillis foliorum superiorum, 2.5-3 cm longi, graciles, leviter puberuli, 1-2-flori. Flores flavi, 2-3 cm longi; pedicelli circ. 2 cm longi, graciles, parce puberuli, basi bracteati; bractaeae lineares 3 mm longae, albo-puberulae; sepalis lateralibus 2, lanceolata, viridia, 7 mm longa, 2 mm lata, apice acuminata, extus puberula, 3-nervia; vexillum orbiculare, 1.3 cm diam., apice emarginatum, costatum dorso ad medium viride cornuto-prominens; alae stipitatae, bilobatae, 2 cm longae, lobo basali oblato, apice rotundato, rubro-punctato, distali dolabriformi, apice leviter acuto, eo basali leviter longiore; dorsaliter auricula semiorbiculari praedito; labellum infundibulare, calcaribus 2.5 cm longum incurvum, ad extremum obtuso attenuatum; limbo 1 cm longo, rubro-striato, stamina 7.5 mm longa, filamentis filiformibus, 6 mm longis, antheris obtusis; ovarium lineare, leviter incurvum, 5.5 mm longum, glabrum. Capsulae clavatae, circ. 1.2 cm longae, prope apicem leviter crassatae, inferne attenuatae.

**Yunnan (云南):** Luchun (绿春), Xiaoheijiang (小黑江), Dafu-erfu (大甫至二甫), alt. 1 000 ~ 1 300 m, 2000-10-25, in second forest, Shui Yu-Min et Chen Wen-Hong (税玉民, 陈文红) 13922 (Holotypus, KUN).

本种近蒙自凤仙花 (*I. mengtzeana* Hook. f. ), 但本种花较小, 侧生萼片披针形, 翼瓣具柄, 旗瓣背面中肋中部角状突起而异。

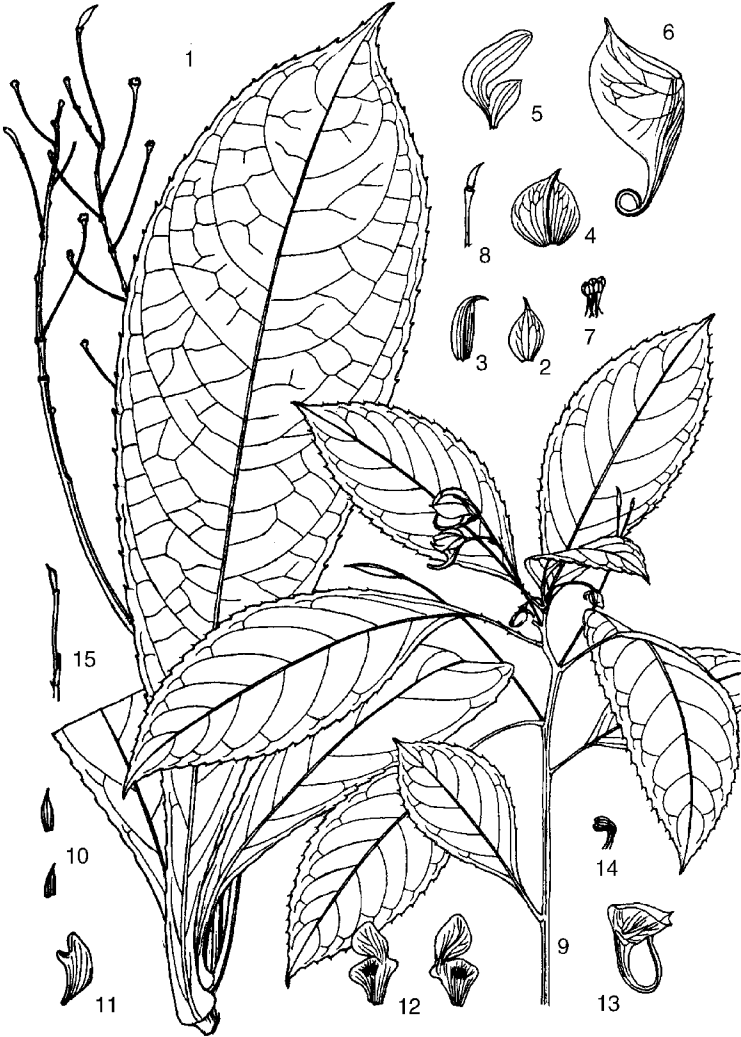


图9 1~8. 耳叶棒凤仙花; 1. 植株; 2. 外萼片; 3. 内萼片; 4. 旗瓣; 5. 翼瓣; 6. 唇瓣; 7. 花丝及花药; 8. 子房; 9~15. 狭萼凤仙花; 9. 植株; 10. 侧生萼片; 11. 旗瓣 (侧面观); 12. 翼瓣; 13. 唇瓣; 14. 花丝及花药; 15. 子房。(吴锡麟绘)

Fig. 9 1-7. *Impatiens claviger* Hook. f. var. *auriculata* S. H. Huang, 1. Plant; 2. Outer sepal; 3. Inner sepal; 4. Standard; 5. Wing; 6. Lip; 7. Filaments & anthers; 8. Ovary; 9-15. *Impatiens lancisepala* S. H. Huang, 9. Plant; 10. Lateral sepal; 11. Standard; 12. Wing; 13. Lip; 14. Filaments & anthers; 15. Ovary. (Darwn by Wu Xi-Lin)

19 宽瓣凤仙花 新种 图 10 : 8 ~ 16

*Impatiens latipetala* S. H. Huang sp. nov.

Species haec habitu *I. mengtzeanae* Hook. f. affinis, sed a qua floribus flavidis; vexillo costato dorso triangulato-cristato, lobo basali alae late obovato vel subquadrato, eo distali dolabriformi, apice rotundato; labello infundibulari,

calcar 2.5 – 3 cm longo facile differt.

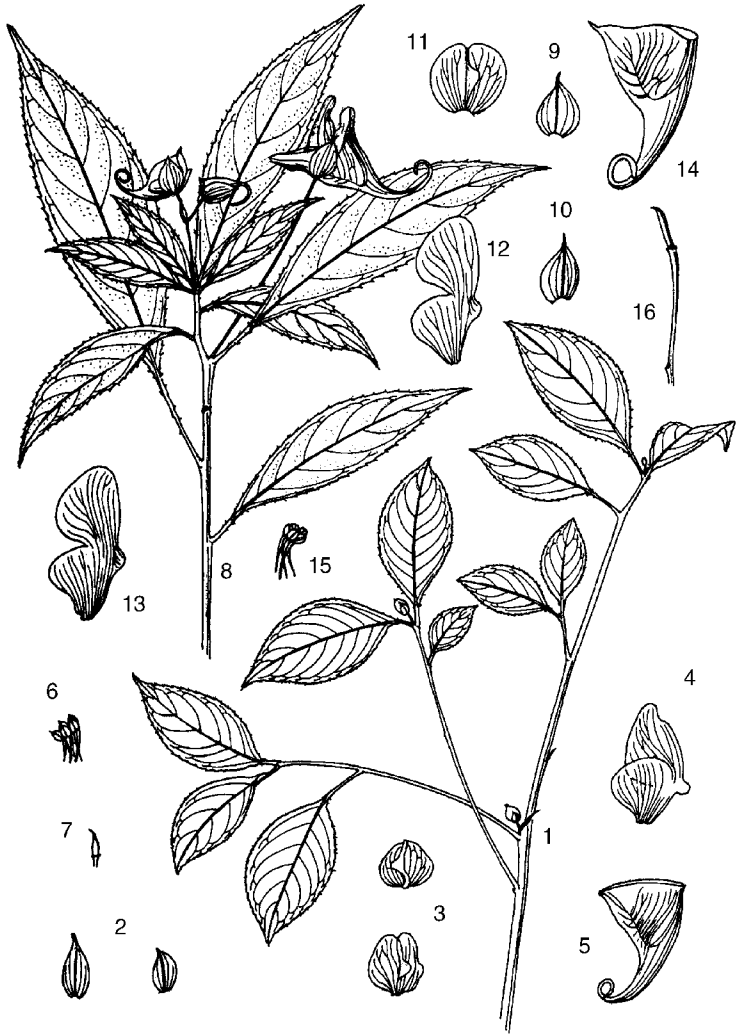


图 10 1~7. 多枝凤仙花; 1. 植株; 2. 侧生萼片; 3. 旗瓣; 4. 翼瓣; 5. 唇瓣; 6. 花丝及花药; 7. 子房;  
8~16. 宽瓣凤仙花; 8. 植株; 9~10. 侧生萼片; 11. 旗瓣; 12~13. 翼瓣; 14. 唇瓣;  
15. 花丝及花药; 16. 子房。(吴锡麟绘)

Fig. 10 1–7. *Impatiens multiramea* S. H. Huang, 1. Plant; 2. Lateral sepal; 3. Standard; 4. Wing; 5. Lip;  
6. Filaments & anthers; 7. Ovary; 8–16. *Impatiens latipetala* S. H. Huang, 8. Plant; 9–10. Lateral sepal;  
11. Standard; 12–13. Wing; 14. Lip; 15. Filaments & anthers; 16. Ovary. (Darwn by Wu Xi-Lin)

Herba perennis, 50 cm alta. Rhizoma breve, radicibus fibrosis numerosis. Caulis erectus, simplex, internodiis brevibus praeditus, leviter angulatus, parce albo-puberulus, ad nodos dense puberulus. Folia alterna, versus apicem caulis saepe conferta, chartacea, ovato-oblonga, vel oblongo-lanceolata, 4.5 – 10.5 cm longa, 1.2 – 2.5 cm lata, apice caudato-acuminata, basi cuneata, attenuata, margine leviter parce serrata, apice mucronato-dentata, inferne glandulis stipitatis 2 – 3 instructa, supra viridula, subtus virella, utrinque glabra, vel parce albo-puberula, narvis lat-

eralibus 7–11-paribus, supra leviter concavis, subtus leviter prominentibus; petiolus 1.3–3 cm longus. Pedunculi ex axillis foliorum superiorum edentes, 1.5–2 cm longi, graciles, glabri, 1-flori; pedicelli 1.7 cm longi, graciles, glabri, prope basin bracteati; bractae sublatae. Flores flavi, 3–4 cm expansi; sepala lateralalia 2, late ovata, 7–10 mm longa, 5-nervia, viridula, glabra; apice rostrata, basi leviter cordata, obliqua, vexillum orbiculare, 1.5 cm diam., apice emarginatum, basi leviter cordatum, costatum dorso viridulum triangulato-cristatum, 3 mm altum; alae stipitatae, 3 cm longae, bilobatae, lobo basali late obovato vel subquadrato, apice rotundato, eo distali late dolabriformi, apice rotundato, inferne attenuato, dorsaliter auricula semiorbiculata, reflexa praeita; labellum infundibulare, 3.5–4 cm longum, calcar 2.5–3 cm longo, ad extremum spiraliter recurvo, leviter rubro, parce puberulo attenuato; limbus rubro-nervis, stamina 8.5 mm longa, filamentis linearibus, 5–6 mm longis, antheris cordatis, apice obtusis; ovarium lineare, 5–6 mm longum, apice acutum, glabrum. Capsulae lineari-cylindricae, circ. 2 cm longae, apice acutae, basi attenuatae, ad medium leviter incrassatae, 1.5 mm diam.

**Yunnan (云南):** Luchun (绿春), Xiaoheijiang (小黑江), Erfu-banpo (二甫至半坡), alt. 1 300 m, margine forest vel road, 2000–10–22, Shui Yu-Min et Chen Wen-Hong (税玉民, 陈文红) 14033 (Holotypus, KUN).

本种近蒙自凤仙花 (*I. mengtzeana* Hook. f.), 但本种花淡黄色, 旗瓣背面中肋有三角状鸡冠突起, 翼瓣基裂片宽倒卵形或近方形, 上裂片宽斧形, 先端圆形, 唇瓣漏斗形, 距长 2.5–3 cm, 易区别。

## 20 多枝凤仙花 新种 图 10: 1~7

*Impatiens multiramea* sp. nov.

Species haec habitu *I. mengtzeanae* Hook. f. affinis, sed a qua caulibus ramosis, foliis minoribus, ovatis vel ovato-ellipticis; floribus minoribus, pedicellis brevioribus, 0.5 cm longis, lobo basali alae oblato, apice leviter acuto, eo distali ovato-triangulato, apice leviter acuto, capsulis lineari-cylindricis facile differt.

Herba, 30 cm alta, glabra. Caulis erectus, ramosus, leviter angulatus. Folia alterna, glabra, versus apicem caulis raepe conferta, ovata vel ovato-elliptica, 3.5–6 cm longa, 1–2 cm lata, apice acuminata vel caudata, basi cuneata, margine leviter serrata, mucronata, supra viridia, subtus virella, nervis lateralibus multijug; petiolus brevis, 4–7 mm longus. Pedunculi solitarii ex axillis foliorum superiorum edentes, vel terminales, 1-flori; pedicelli breves, circ. 0.5 cm longi, basi bracteati; bractae lanceolatae; sepala lateralalia 2, ovata, virella, 6–7 mm longa, 2.5–3.5 mm lata, parce albo-puberula, 5-nervia; vexillum orbiculato-quadriatum, 1 cm longum, 0.9 cm latum, apice emarginatum, basi rotundatum vel truncatum, costatum dorso ad medium viride triangulato-cristatum, 2 mm alta; alae stipitatae, bilobatae, 2.2–2.4 cm longae, lobo basali oblato, apice leviter acuto, eo distali ovato-triangulato, apice leviter acuto, dorsaliter auricula semiorbiculata, reflexa praedito; labellum infundibulare, 3.2–3.5 cm longum, calcar 2.5–2.8 cm longum spiraliter recurvo, ad extremum leviter acuto, circ. 0.8 mm diam. attenuato, limbo purpureo-striato; stamina 6.5 mm longa, filamentis linearibus, antheris ovoideis, apice leviter acutis; ovarium lineare, 5 mm longum. leviter recurvum, apice rostellatum. Capsulae lineari-cylindricae.

**Yunnan (云南):** Luchun (绿春), Xiaoheijiang (小黑江), Dafu-erfu (大甫至二甫), alt. 1 000–1 300 m, 2000–10–25, Shui Yu-Min et Chen Wen-Hong (税玉民, 陈文红) 13900 (Holotypus, KUN).

本种近蒙自凤仙花 (*I. mengtzeana* Hook. f.), 但本种植物体多分枝, 叶较小, 卵形或卵状椭圆形; 花较小, 花梗短, 长 0.5 cm, 翼瓣基裂片扁圆形, 先端稍锐尖, 上裂片卵状三角形, 先端稍锐尖, 蒴果线状圆柱形, 易区别。